



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/004,655	12/04/2001	Jim W. Johnston	01CON207P	9653
25700	7590	09/28/2005		
FARJAMI & FARJAMI LLP 26522 LA ALAMEDA AVENUE, SUITE 360 MISSION VIEJO, CA 92691			EXAMINER LIOU, JONATHAN	
			ART UNIT	PAPER NUMBER
			2663	

DATE MAILED: 09/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/004,655	Applicant(s) JOHNSTON ET AL.	
	Examiner Jonathan Liou	Art Unit 2663	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 December 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-49 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-49 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 December 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

1. Claims 4, 12, 17, 28, 36, 41, and 47 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
2. The phrase "dictionary size" in claims 4, 12, 17, 28, 36, 41, and 47 are vague and indefinite for one who have ordinary skill in the art to define the size of the parameter as claimed. In general, 9-bit holds 512 entries dictionary and 12-bit hold 4096 dictionary. The examiner suggests the applicant to specify the amount of memory for dictionary compression size.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 38, 44, and 49 are rejected under 35 U.S.C. 102(e) as being anticipated by Cave et al. (U.S. Pub. No. 2001/005372).

Art Unit: 2663

1. As per claim 38, Cave et al. teach a communication method for use in a communication system including a first communication device, a second communication device, a third communication device and a fourth communication device, said second communication device being in communication with said third communication device over a packet network, said first communication device being in communication with said second communication device over a first communication line and said third communication device being in communication with said fourth communication device over a second communication line (**the first communication device could be 210, which is coupled to PSTN 202; the second communication device could be gateway 214; the third communication device could be gateway 224; and, the fourth communication device could be the modem 210, which is coupled to PSTN 220. See Fig. 2, Cave et al.**), said method comprising the steps of:

Receiving a first compressed data from said third communication device by said second communication device over said packet network, wherein said first compressed data is compressed according to a first protocol by said fourth communication device (**the third communication device 224 sends the first compressed data over packet network to the second communication device 214, wherein first compressed data is compressed according to a first protocol by fourth communication device 210, which is couple to PSTN 220, and a first protocol could be G. 711 because PSTN 220 could only take G.711 as Cave et al. taught. See sec [0017], and Fig. 2, Cave et al.**)

Decompressing said first compressed data, by said second communication device according to said first protocol to generate a first decompressed data (**the second communication device decompressed the first compressed data. Fig. 2, Cave et al.**)

Compressing said first decompressed data to generate a second compressed data, wherein said second compressed data is compressed by said second communication device according to a second protocol (**The second device could compressed the first decompressed data again to generate a second compressed data according to a second protocol, which could be G. 723 or G.711. See Fig. 2, Cave et al.**)

Transmitting second compressed data to said first communication device (**the compressed data is sent to modem 210 as shown in Fig. 2, Cave et al.**)

2. As per claim 44, Cave et al. teach a communication device for use in a communication system including a first device, as second device and a third device, said communication device being in communication with said second device over a packet network, said first device being in communication with said communication device over a first communication line and said third device being in communication with said second device over a second communication line (**a communication device could be the gateway 214; a first device could be 210, which is coupled to PSTN 202; a second device could be the gateway 224; and, a third device could be the modem 210, which is coupled to the PSTN 220. See Fig. 2, Cave et al.**), said communication device comprising:

Art Unit: 2663

A first receiver capable of receiving a first compressed data from said second device over said packet network, wherein said first compressed data is compressed according to a first protocol by said third device **(the second device 224 sends the compressed data over packet network to a communication device 214, which has to a receive, according to a first protocol, which could be G. 711 See Fig. 2, Cave et al.)**

A data decompressor capable of decompressing said first compressed data, according to said first protocol to generate a first decompressed data **(the communication device 214 decompress the first compressed data according to first protocol. See Fig. 2, Cave et al.)**

A data compressor capable of compressing said first decompressed data to generate a second compressed data, wherein said second compressed data is compressed according to a second protocol **(the data could be recompressed according to second protocol. See Fig. 2 and sec [0017], Cave et al.)**

A first transmitter capable of transmitting said second compressed data to said first device **(the communication device is capable to send the compressed to first device 210, which is coupled to PSTN 202. See Fig. 2, Cave et al.)**

3. As per claim 49, the communication device 214 could have a second receiver capable of receiving a third compressed data from said first device over said first communication line **(Fig. 2, Cave et al.)** a second transmitter capable of transmitting said third compressed data to said second device over said packet network **(Fig. 2, Sec [0017], Cave et al.)**

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1, 2, 5, and 43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cave et al. (U.S. Pub. No. 2001/005372).

5. As per claim 1, Cave et al. teach a communication method for use in a communication system including a first communication device in communication with a second communication device over a packet network (Fig. 2-3, Cave et al.), said method comprising the steps of:

receiving a first compressed data from said second communication device by said first communication device over said packet network, wherein said first compressed data is compressed according to a first protocol (Cave et al. teach the first compressed data is compressed according to a first protocol of G.711 and transmitted from second communication device 224 to first communication device 214 as shown in Fig. 2 of Cave et al.)

decompressing said first compressed data, by said first communication device, according to said first protocol to generate a first decompressed data (Cave et al. teach the first compressed data is decompressed to by first communication device 214. Since Cave et al. teach that the protocol could be either on G. 711 or G.723; then, decompressing the first compressed data by first communication device could be

Art Unit: 2663

according to the same first protocol, which is G.711 as taught above. See Fig. 2, and page 3, sec [0017], Cave et al.)

compressing said first decompressed data to generate a second compressed data, wherein said second compressed data is compressed by said first communication device according to a second protocol (Cave et al. teach the first communication device 214 could compress the data again according to second protocol G.723. See Fig. 2, and page 3, sec [0017], Cave et al.)

transmitting said second compressed data to a third communication device in communication with said first communication device (From Fig.2, the compressed translate data from first communication device 214 could transfer to the third communication device 210, which is couple d to PSTN 202. See Fig. 2, and page 3, sec [0017], Cave et al.)

Cave et al. does not explicitly teach receiving a third compressed data from said third communication device by said first communication device, wherein said third compressed is compressed according to said second protocol and transmitting said third compressed data to said second communication device by said first communication device recited in the claim 1. However, Cave et al. teach if the connection to the external device is back through gateway 214 and packet network 216, the entire sequence of compression/decompression and translation must be performed again (Fig. 2, and page 3, sec [0017], Cave et al.) This implies the data needs to get compressed, which becomes the third compressed data. The third compressed data could send back to the first communication device in order to provide the

Art Unit: 2663

communications between modems. The third compressed data could be compressed according to G.723, which could be the second protocol as claimed. Since Cave et al teaches the connection to the external device is reverse from the original path; then, the third compressed data could be sent to the second communications device 224 by the first communication device 214.

Thus, it would have been obvious for one who have ordinary skill in the art at the time the invention was made to transmit the data from the third communication device to the first communication device and to the second communication device because this would provide the advantage of bi-direction transmitting for calling systems. In addition, Cave et al. does imply his method could be redirection from external communication device to the other devices (page 3, sec [0017], Cave et al.)

6. As per claims 2 and 5, Cave et al. teach the protocol could be translated the same or different (page 3, sec [0017], Cave et al.); hence, first protocol could be the same or different with the second protocol.

7. As per claim 43, Cave et al. teach the method of claim 38; however, he does not explicitly teach receiving a third compressed data from said first communication device by said second communication device over said first communication line; and, transmitting said third compressed data by said second communication device to said third communication device over said packet network recited in the claim 43.

Cave et al. teach if the connection to the external device is back through gateway 214 and packet network 216, the entire sequence of compression/decompression and

Art Unit: 2663

translation must be performed again (Fig. 2, and page 3, sec [0017], Cave et al.) This implies that the compressed data could sent back to the first communication device in order to perform compressed translation, and this would result the third compressed data is received by the second communication device 214 from the first communication device 210, which is coupled to PSTN 202. The third compressed data could be compressed in communication device 214 according to G.711 because the compressed data need to be in the format of G.711 since PSTN 202 could only take G.711 data, and the compressed data is called as the third compressed data. Since Cave et al teaches the connection to the external device is reverse from the original path; then, the third compressed data could be sent to the third communications device 224 by the second communication device 214.

Thus, it would have been obvious for one who have ordinary skill in the art at the time the invention was made to transmit the data from the third communication device to receive the third compressed data from first communication device to the second communication device and transmit third compressed data to the third communication device by the second device because this would provide the advantage of bi-direction transmitting for calling systems. In addition, Cave et al. does imply his method could be redirection from external communication device to the other devices (page 3, sec [0017], Cave et al.)

8. Claims 3-4, 7-8, 11-13, 23-32, and 35-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cave et al. (U.S. Pub. No. 2001/0005372), and further in view of G. Fayed (EP 1047231.)

Art Unit: 2663

9. As per claim 7, Cave et al. teach a communication method for use in a communication system including a first modem, a second modem, and a third modem (A first modem could be 210, which connected to PSTN 220. A second modem could be gateway 224, and a third modem could be gateway 214. See Fig. 2, Cave et al.), said method comprising the steps of:

Receiving a call from said first modem by said second modem over a telephone line (a first modem 210 could send the data, which could be a call, to the second modem 214 over a cable or telephone line. See Fig. 2, Cave et al.)

Contacting said third modem by said second modem over a packet network (See Fig. 2, Cave et al.)

Receiving information, from said third modem by said second modem, relating to one or more data compression protocols supported by said third modem (Cave et al. teach the system could be transmitted from third modem 214 back to packet network and back to second modem 224. The compression data could be according to G.711 or G.723 protocols supported by third modem. (page 3, sec [0017], Cave et al.)

Cave et al. does not specifically teach handshaking by said second modem with said first modem to establish a connection, and negotiating a first data compression protocol by said second modem with said first modem, wherein said first data compression protocol is according to said information relating to one of said one or more data compression protocols. Nevertheless, G. Fayed teach handshaking and negotiating between two modems. In general, protocols handshaking and negotiating between modems are usually establish a connection between modems and generate

one common protocol, that depends on the rate or speed of modem, in order to communicate through the same compression protocol. G. Fayed teaches gateway 308 and modem 304 may be configured to support a data link layer protocol (Fig. 3 and sec [0042], G. Fayed), and this method could be considered handshaking to establish a connection as claimed. G. Fayed further teach negotiating the segment of communication between gateway 308 and modem 304, and the data compression protocol is according to information related to V.42 (Fig. 3 and sec [0042], G. Fayed.) Therefore, G. Fayed teaches handshaking by second modem with first modem and negotiating a data compression protocol by second modem with first modem, and data compression protocol is according to information relating to compression protocols as claimed.

Since G. Fayed teach data packet protocol communication technique (sec [0001], G. Fayed) and Cave et al. teach transferring information via packet network (col 1, sec [0002], Cave et al.), it would have been obvious for one who have skill in the art at the time the invention was made to have handshaking and negotiating for establish a protocol connection because the gateway modern needs to have a connection with modem in the Cave et al.'s system (Fig. 2, Cave et al.)

10. As per claim 3, Cave et al. teaches the method 2. However, Cave et al. does not explicitly teach the parameter as claimed. G. Fayed teaches the parameters includes in the protocols (sec [0033]-sec [0037])) Cave et al., in view of G. Fayed teach first protocol has a plurality of first parameters and said second protocol has a plurality of second parameters, and wherein at least one parameter of said plurality of first

Art Unit: 2663

parameters is different than a corresponding parameter of said plurality of second parameters. The same rationale and basis as applied to claim rejections 1 and 7 are applied here.

11. As per claim 4, G. Faye teaches the parameter could a window size, which could be the same as a dictionary size (sec [0035], Cave et al.)

12. As per claim 8, Cave et al. teach sending G.711 data format from the first modem 210 to the second modem 224 (sec [0017], and Fig. 2, Cave et al.) In general, G.711 is an ITU-T standard to represent 8 bit compressed pulse code modulation samples.

Hence, Cave et al. teach sending a first compressed data from first modem by second modem, wherein said first compressed data is compressed according to said first data compression protocol, which could be G.711. The second modem 224 send the first compressed data to the third modem 214 over packet network (Fig. 2, Cave et al.)

Therefore, Cave et al. teach the limitation recited in claim 8.

13. As per claim 11, Cave et al. teach information relating to one protocol includes information relating to at least one parameter of one data compression protocol (Cave et al. teach receiving a data relating to one protocol, such as G.711, which is for audio codec; meaning the voice as the parameter included in the protocol (sec [0014], sec [0017], Cave et al.))

14. As per claim 12, the same rationales and basis as applied to claim rejections 4 and 11.

15. As per claim 13, the method of Cave et al., in view of G. Fayed, teach determining that said first data compression protocol, including its parameters, is the

Art Unit: 2663

same as a second data compression protocol, including its parameters, negotiated between said third modem and a fourth modem (Cave et al. teach the first data compression protocol could be in G.711 or G.723 compressed format, including its parameters, which could be the voice data. Then, Third modem would generate the second data with the protocol, G.711 or G.723. See sec [0017], Cave et al. Since Cave et al. teach the packet compression method could be either in G. 711 or G.723 format, and teach the entire sequence of compression/decompression and translation need to perform if the connection require back to the first modem (sec [0017], Cave et al.); thus, Cave et al. teach determining that said first data compression protocol, including its parameters, is the same as a second data compression protocol, including its parameters because the compression/decompression process have to determine whether the protocols are the same. The fourth modem could be modem 210, which is coupled to PSTN 202 to the third modem 214 in the Fig. 2 of Cave et al.'s reference. Following the same rationale as applied to claim 7, the negotiation could occur between third modem and fourth modem.)

Receiving a first compressed data from said third modem by said second modem, wherein said first compressed data is compressed according to said first data compression protocol; and, transmitting said first compressed data to said first modem by said second modem (Cave et al. teach the data could be sent back from third modem 214 to 224 and the second modem could compressed the data again according to the first data compression protocol in order to send through PSTN 220. to first modem 210, which is coupled to PSTN 220. See Fig. 2 and sec [0017], Cave et al.)

Art Unit: 2663

16. As per claim 23, Cave et al. teach a processing module capable of contacting a second modem over a packet network in response to said call, and capable of receiving information from said second modem relating to one or more data compression protocols supported by said second modem (A processing module could be located in the modem 214, the first modem is the modem 210, and the second modem could be gateway 224. See Fig. 2, Cave et al.) The same rationale and basis as applied to claim 7 are applied to the remainder of claim 23.

17. As per claim 24, Cave et al. teach modem is capable of receiving a first compressed data from said first modem, said first compressed data being compressed according to said first data compression protocol (second modem 224 received the compressed data from first modem 210, which is couple to PSTN, and is compressed according to G.711 protocol. See Fig. 2, Cave et al.) Modem is capable of transmitting first compressed data to second modem (the modem could transmitting first compressed data to second modem 214. Fig. 2, Cave et al.)

18. As per claims 25-26, the modem is capable of receiving a second compressed data from second modem (the modem 214 could receive a second compressed data from second modem 214. Fig. 2, Cave et al.) Second compressed data being compressed according to a second data compression protocol (second compressed protocol could be G.723. See Fig. 2 Cave et al.)

the modem 224 in the Cave et al.'s reference does not specifically teach decompressing second compressed data. . However, Bruno et al. teach compressor/decompressor could be associated with gateway modem (col 7-8, lines 64-

Art Unit: 2663

10, Bruno et al.) The same rationale are applied to claim rejections 9-10 and 23 are applied to teach the modem 224 could have compressor/decompressor function based on Cave et al. in view of G. Fayed, and further in view of Brno et al. Then, the method of Cave et al., in view of G. Fayed, and further in view of Brno et al., could perform the remainder limitations in the claims 25-26 (Fig. 2 and sec [0017], Cave et al.)

19. As per claim 27, the same rationale as applied to claim rejections 11 and 23 are applied.

20. As per claim 28, the same rationale as applied to claim rejections 4 and 23 are applied.

21. As per claim 29, the same rationales are applied to claim rejection 13 and 23 are applied. However, the second modem here is 214 and the third modem is 210, which is coupled to PSTN 202.

22. As per claim 30, the same rationales are applied to claim rejection 7 are applied to the claim 30. Further, Cave et al. teach the third modem is in communication with a device (Fig. 2, Cave et al.)

23. As per claim 31, Cave et al. teach the device could be server (sec [0025], Cave et al.)

24. As per claims 32, and 35-36, the same rationales and basis as applied to claims 8, 11-12, and 30 are applied.

25.

26. Claims 14-15, 18, and 20-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cave et al. (U.S. Pub. No. 2001/0005372), in view of Bruno et al. (U.S. Pat. No. 5,724,355.)

27. As per claim 14, Cave et al. teach a communication device comprising:

A receiver capable of receiving a first compressed data from a first device over a packet network, wherein said first compressed data is compressed according to a first protocol (Gateway 214 have a receiver for receiving a first compressed data from a first device over packet network, the first compressed could be compressed according to a first protocol with G. 711. See Fig. 2 and sec [0017], Cave et al.)

a decompressing module capable of decompressing said first compressed data according to said first protocol to generate a first decompressed data (The first protocol could be G. 711 from the device 224 to 214. See sec [0017] and Fig. 2, Cave et al.)

a compressing module capable of compressing said first decompressed according to a second protocol to generate a second compressed data (The second protocol could be G. 723, which is compressed in the device 214. See sec [0017] and Fig. 2, Cave et al.)

a transmitter capable of transmitting said second compressed data to a second device over a communication line (Fig. 2, Cave et al.)

Cave et al. does not clearly show a third compressed data from the second device is passed through to said first device, and wherein said third compressed data is compressed according to said second protocol. Bruno et al. teach the compressor and decompressor. Following the same rational and basis as applied to claims 9-10, the

Art Unit: 2663

second device could compress the third compressed data according to the second protocol.

28. As per claims 15 and 18, the same rationale and basis are applied to claims 2, 5, and 14 are applied.

29. As per claims 20-21, second device is a gateway modem, and wherein said gateway modem is in communication with a client modem over a telephone line (Fig. 2, Cave et al.) the device could be a server (Cave et al. teach the gateway modem could be a computer server See sec [0025], Cave et al.)

30. As per claim 22, device is a gateway modem and said second device is a client modem (See Fig. 2, Cave et al.)

31. Claims 9-10, 33-34 and 37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cave et al. (U.S. Pub. No. 2001/0005372), in view of G. Fayed (EP 1047231.) as applied to claims 7-8 above, and further in view of Bruno et al. (U.S. Pat. No. 5,724,355.)

32. As per claims 9-10, the method of Cave et al. and in view of G. Fayed teach the method of claims 7-8 further comprising the steps of:

Receiving a second compressed data from said third modem by said second modem, wherein said second compressed data is compressed according to a second data compression protocol (Cave et al. teach the modem 214, which could be the third modem, could send the second compressed data back to the second modem 224. See Fig. 2-3, Cave et al. The second compressed data could be compressed according to a

Art Unit: 2663

second data compression protocol, which could be G.723, if the first protocol is G. 711 or G.723.)

Compressing the compressed data by second modem according to first protocol (Fig. 2, Cave et al.)

Their method does not explicitly teach decompressing second compressed data by second modem, compressing second decompressed data to generate a third compressed data, wherein said third compressed data is compressed by said second modem according to first protocol. However, Bruno et al. teach compressor/decompressor could be associated with gateway modem (col 7-8, lines 64-10, Bruno et al.) If the second modem 214 in Cave et al.'s structure could have compressor/decompressor, as taught by Bruno, the second modem could decompress the second compressed data, receiving from the third modem. The compressed data could be according to the second protocol as taught above, that protocol could be G.723 if the first protocol is G. 711. Then, the second modem 214 compressor would compress the data according to G. 711 in order to transmit to the first modem 210 through PSTN 220 because PSTN 220 could only take G.711 protocol signal. This would be compressing the second decompressed data to generate a third compressed data, which is according to the first protocol, and transmit a third compressed data to the first modem by second modem. Since Cave et al. teach the external device could connect to other external device, the connection could be reverse (sec [0017, Cave et al.), it would have been obvious for one who have skill in the art at the time the invention was made to include the compressor and decompressor in the second modem to

Art Unit: 2663

perform compressing and decompressing the second and third compressed data because the Voice between the modems or phones to have two way transmission and need to have compressor and decompressor for receiving and transmitting the signal since both PSTN and Packet network system in Cave et al.'s reference are taking different protocols .

33. As per claims 33-34 and 37, the same rationales are applied to claim rejections 9-10, 13 and 30 above are applied.

34. Claims 16-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cave et al. (U.S. Pub. No. 2001/0005372), in view of Bruno et al. (U.S. Pat. No. 5,724,355.) as applied to claims 14-15 above, and further in view of G. Fayed (EP 1047231.)

35. As per claims 16-17, the same rationales and basis as applied to claim rejections 3-4 and 14-15 are applied.

36. Claims 6, 42, and 48 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cave et al. (U.S. Pub. No. 2001/005372), in view of Heath (U.S. Pub. No. 2002/0009136).

37. As per claims 6, 42, and 48, Cave et al. teach the method of claim 1. Cave et al. teach the protocols of G. 711 and G. 723. Cave et al. does not specifically teach using the first protocol of V. 44 and V. 42bis. Nevertheless, Heath teaches uses the protocols V.44 and V.42bis for the modem negotiating (sec [0028], Heath.) Since Heath would directly teach modem protocols (sec [0005] – sec [0007], Heath.), which are applied to the subject matter of Cave et al.'s system, it would have been obvious for one who have

Art Unit: 2663

skill in the art at the time the invention was made to use the protocols V.44 and V.42bis because this would be more efficient to transmit over an error-controlled connection (sec [0023], Heath.) In addition, Cave et al. teach other protocols might be used too (sec [0014], Cave et al.)

38. Claim 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cave et al. (U.S. Pub. No. 2001/0005372), in view of Bruno et al. (U.S. Pat. No. 5,724,355), and further in view of Heath (U.S. Pub. No. 2002/0009136).

39. As per claim 19, the same rational and basis as applied to claim rejections 6 and 14 are applied.

40. Claims 40-41, 46-47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cave et al. (U.S. Pub. No. 2001/0005372), in view of G. Fayed (EP 1047231), and further in view of Heath (U.S. Pub. No. 2002/0009136).

41. As per claims 40 and 46, Cave et al. teaches the method in claims 38 and 44. Cave et al. does not explicitly teach the parameters are different between the first and second protocols and using V. 42bis as the compression protocol as claimed. G. Fayed teaches using the compression protocol includes the parameters and the parameters could be different for negotiation between modems (sec [0037], G. Fayed.) Heath teaches using V.42bis compression protocol for modem negotiating. Therefore, the method of Cave et al., in view of G. Fayed, and further in view of Heath could teach the limitations recited in claims 38 and 44. Since G. Fayed teach the system to implement of method of packet networks (sec[0001], G. Fayed), Heath teach the data compression method between the data transmission through the network system (sec [0003],

Art Unit: 2663

Heath.), Cave et al. teach transferring the data via the packet network f(sec [0002], Cave et al.); thus, it would have been obvious for one who have ordinary skill in the art at the invention was made to using V.42bis compression protocol for the first and second protocols and having the different parameters according to the first and second protocols because the negotiating between the modems need to decide the different parameters and protocols between the modems. In addition, G. Fayed teach negotiating the parameters for the working parameters (sec [0037], G. Fayed.)

42. As per claim 41, the same rationales and basis as applied to claims 4 and 40 are applied.

43. As per claim 47, the same rationales and basis as applied to claims 4 and 46 are applied

44. Claims 39, 45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cave et al. (U.S. Pub. No. 2001/0005372), in view of Davis et al. (U.S. Pat. No. 5,483,530).

45. As per claims 39 and 45, Cave et al. teach the method of claims 38 and 44. He does not teach using the protocols MNP5 and V.42bis. However, Davis et al. teach using MNP5 and V.42bis to use as the protocols for compression data. The method of Davis et al. is related to data communication for the computer device, such as modems, to communicate each other (col 1, lines 24-28, Davis et al.); thus, it would have been obvious for one who have ordinary skill in the art at the invention was made to use MNP5 and V.42bis for the first and second compression code because it would provide

the advantage for efficient error coding and data compression. In addition, Cave et al. teach various coding technique could be used for their method (sec [0014], Cave et al.)

Conclusion


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jonathan Liou whose telephone number is 571-272-8136. The examiner can normally be reached on 8:00AM - 5:00PM Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ricky Ngo can be reached on 571-272-3139. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Jonathan Liou

9/20/05


RICKY NGO
PRIMARY EXAMINER